

IN THE SPECIFICATION:

On page 1, prior to line 5, please insert the following headings and paragraph:

--Cross Reference to Related Applications

This application is for entry into the U.S. national phase under §371 for International Application No. PCT/IB02/004618 having an international filing date of November 5, 2002 and from which priority is claimed under all applicable sections of Title 35 of the United States Code including, but not limited to, Sections 120, 363 and 365(c).

Technical Field--

On page 1, prior to line 10, please insert the following heading:

--Background of the Invention--

On page 1, please amend the paragraph beginning at line 32 as follows:

-- From the energy point of view the all signals referring to the aforementioned information parts are superimposed in the same frequency band at the same time and consequently each signal power adds to the total signal power transmitted within the same frequency band. But unfortunately the total signal power transmitted and the interference and noise power are associated with ~~another~~ each other. Therefore and due to other reasons power control is essential in code division multiple access (CDMA) systems and hence also in wideband code division multiple access (WCDMA) systems.--

On page 4, prior to line 8, please insert the following heading:

--Summary of the Invention—

On page 4, please amend the paragraph beginning at line 15 as follows:

-- The method for adjusting the transmission power of an uplink re-transmission caused by an automatic repeat request (ARQ) according to an embodiment of the invention overcomes the above described state of the art problems, especially the unnecessary exceeding of the

combined SNR value and provides a couple of advantages resulting therefrom. The transmission power of the re-transmission(s) is adapted with reference to the channel conditions and the basic adjustment algorithm allows for fast optimizing the transmission power of data re-transmissions in a flexible way by varying transmission power in a range from zero power deduction relative to the original transmission power to a maximal reduced power allowed in the system, wherein the method is based on available information and does not require any additional signaling. The optimized transmission power of data re-transmissions results in an efficient signal energy per bit divided by noise spectral energy (E_b/N_0) operation in code division multiple access (CDMA) and particularly in wideband code division multiple access (WCDMA) systems. The signal energy per bit divided by noise spectral energy (E_b/N_0) defines a value that is required to meet a predefined quality of service (e.g. bit error rate), wherein the noise includes both thermal noise and interference. An efficient E_b/N_0 operation results in an efficient communication link operation and an overall efficient operation of a communication cell (e.g. relating to data rate).--

On page 8, please amend the paragraph beginning at line 36 as follows:

--According to an embodiment of the invention, the mobile terminal device further comprises a component for comparing an a deviation or an a variation of a difference between the error ratio and a pre-defined target error ratio with a pre-defined deviation level and a component for determining a transmission power correction. The transmission power correction factor is a function of at least a transmission power correction step value, the first error quantity, the second error quantity and the pre-defined target error ratio. According to an embodiment of the invention the component for comparing compares an absolute deviation or an absolute variation of the difference with the pre-defined deviation level.--

On page 9, please amend the paragraph beginning at line 8 as follows:

--According to an embodiment of the invention, the component for determining the transmission power correction factor is further able to compare the error ration and the pre-defined target error ratio. In case of the error ratio is greater the transmission power correction factor is determined such that transmission power factor is increased and in case the error ratio is smaller ratio the transmission power factor is decreased.--

On page 10, prior to line 19, please insert the following heading:

--Brief Description of the Drawings--

On page 11 prior to line 5, please insert the following heading:

--Detailed Description--

On page 16, please amend the paragraph beginning at line 1 as follows:

--The above described H-ARQ method comprising an acknowledgement/non-acknowledgement signaling which instructs a transmitter to re-transmit information corresponding to a data transmission of which data is not decodable, and operating directly on physical transmission channels is denoted as physical hybrid automatic repeat request. The re-transmitted information in case of a non-acknowledgement signalizing depends on the type and kind of the employed H-ARQ method. In case of a ~~combining~~ combining H-ARQ method all received data corresponding to a certain data packet (i.e. the 1st transmitted data packet (corrupted, erroneous), the 1st re-transmitted data packet (correcting information) and eventually further 2nd, 3rd ... re-transmitted data packets) has to be stored until data is decodable from the total received original corrupted data and correcting information data. Consequently, the maximal number of allowed re-transmission depends on the data storage capacity of the receiver or has to be fitted to the capacity of the receiver, respectively.--

On page 26, please amend the paragraph beginning at line 30 as follows:

--In an operation S220, an absolute ~~values~~ value of the i-th re-transmission adjustment power correction value ΔP_i [dB] is retrieved from the pre-calculated matrix in accordance with the first quantity N_i and the second quantity K_i . The calculation of this matrix is based on the pre-defined target FER, $C_{N_i}^{K_i}$ is the binomial coefficient (compare with the mathematical definition above) and an i-th transmission power correction step value ΔP_{i_step} [dB]. Each column of the matrix contains absolute values of the i-th re-transmission adjustment power correction value ΔP_i [dB] corresponding to a certain first quantity N_i and each row of the matrix contains absolute values of the i-th re-transmission adjustment power correction value ΔP_i [dB] corresponding to a certain second quantity K_i . That is, the absolute i-th re-

transmission adjustment power correction value $|\Delta P_i \text{ [dB]}|$ is defined as a function of the first quantity N_i and the second quantity:

$$|\Delta P_i \text{ [dB]}| = |\Delta P_i(N_i, K_i) \text{ [dB]}| = \left(\frac{C_{N_i}^{K_i} \text{ FER}^{K_i} (1 - \text{FER})^{N_i - K_i}}{\text{FER}} \right)^{-1} \Delta P_{i_{\text{step}}} \text{ [dB]} --$$